



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
<http://www.blm.gov>



cc: Paul
M0470010

IN REPLY REFER TO:
3590
UTU-0126940
(UT-923)

MAY 04 2007

CERTIFIED MAIL--Return Receipt Requested

Mr. Earl White
American Gilsonite Company (AGC)
29950 South Bonanza Highway
Bonanza Utah, 84008

RECEIVED

MAY 07 2007

DIV. OF OIL, GAS & MINING

Re: Mine Plan Modification Approval, Federal Gilsonite Lease UTU-0126940, B-44 through B-48 mine sites and Shafts (Initial location).

MINE PLAN MODIFICATION APPROVAL

Background- BLM received a request from the American Gilsonite Company to modify their approved mining by changing the method used to sink the shaft. The method in the presently approved plan is to sink the shaft in a conventional manner. This means chipping rock and gilsonite and placing the material by hand in (usually 5 gallon) buckets and hoisting them to the surface. A conventional gilsonite shaft is rectangular in shape and if the vein (as in this case) at the surface is narrow, blasting may be employed in order to move rock that is too difficult to chip with sinking hammers. This is a very laborious process at this site because the vein is very narrow and there will be a lot of rock moved. When the gilsonite is thick enough to mine, a suction pipe is placed down the shaft to extract the gilsonite and the rock is chipped from the sides of the vein and placed into buckets. The surface area around the shaft has been approved for disturbance. Previous mining on this vein shows that the vein will widen at depth. This proposal will not change the amount of surface disturbance.

AGC has submitted a second modification to temporarily place a 4 inch diameter plastic pipe on the ground surface to discharge water from a dewatering well at the B-48 site. The pipe would be run to the B-44 shaft. The existing mining plan approves the dewatering wells, but the pipe run is not approved in the plan. This proposal will not change the amount of surface disturbance. The pipe will cross a road and the company will place the plastic pipe in a steel pipe and bury the pipe run under the road.

Proposed Modification - AGC is proposing drill a 7 foot diameter hole to use as a shaft in the upper part of the vein in lieu of the conventional shaft sinking methods. The shaft will then be lined with a metal liner down to the point where the gilsonite vein is 28 inches wide. Where the circular shaft stops, the shaft will be sunk in a conventional manner. To accomplish this the first operation will be to drill a number of 3.75 inch diameter holes to determine where the vein will be 28 inches thick. This is

necessary in order to determine the length of the steel liner that will be placed down the shaft. The second operation will be to drill a 7 foot diameter hole down to where the vein is 28 inches wide. The liner will be put into and secured in-place. The drill will be equipped with dust collection devices or the hole will be drilled wet. The cuttings will be either, placed on-site, used for fill or leveling of the site or will be moved off-site. If the cuttings remain on-site, they will be placed down the shaft during reclamation.

AGC has also requested to temporarily place a four (4) inch diameter pipe on the surface to carry water from a dewatering well at the B-48 site. This pipe will be run to the B-44 shaft and then it will be discharged from the B-44 shaft site. AGC has an NPDES permit with the Environmental Protection Agency (EPA) and the B-44 site is a permitted site. This will be done until the B-48 site is permitted with the EPA. BLM has contacted region 8 of the EPA and they concur with this action.

Approval- BLM approves changing the proposed method of shaft sinking for the B-48 and B-46 shaft sites and the pipe run from the B-48 mine site to the B-44 shaft. The company will obtain any additional approvals to cross the road that may be necessary. (See Map Enclosed)

NEPA- There is no new surface disturbance due to this action and therefore this action is Categorically Excluded (CX) under DM 518 chapter 11, paragraph F. (8) Approval of minor modifications to or minor variances from activities described in an approved underground or surface mine plan for leasable minerals. (e.g., change in mining sequence or timing.). This is documented in CX –UT-USO-07-008.

Bond- For the B-48 mine site / B-50 escapeway, BLM has calculated the lease performance (reclamation, rents and royalties) liability at \$39,000 (this has been escalated 5 years into the future). This equates to a \$19,000 liability for the reclamation, and a \$20,000 liability for rents and royalties. At the present time there is an uncommitted excess of \$9,900 on Bond UT-000206 which can be used for this site (lease). With this applied to the project, BLM requires an additional amount of \$29,000 be submitted to this office within 30 days of receipt of this approval. (Numbers are not additive because they have been rounded).

Conditions of Approval-

1. **Bond.** Bond is acceptable.
2. **Drill Holes.** All drill holes except the shaft drill hole will be plugged in accordance with the Utah Division of Oil, Gas and Mining's non-coal rules R 647-2-108.
3. **Shaft Material.** All shaft material will be placed down the shaft if it remains on-site.
4. **Consultation.** The AO may conduct Native American Consultation based upon the significance of any discovery of cultural resources within the lease area. Additional operational conditions or stipulations may result.
5. **As Built Drawings.** The Lessee will submit to the Deputy State Director, Natural Resources, BLM Utah State Office, at the above address, a scaled map showing the construction and the survey coordinates (State Plane or metes and bounds description) of each of the mine features, buildings, and vein, within 90 days after construction is complete. The surveyor that conducts the survey will be licensed and shall stamp the drawing. Land features will be shown on the drawing. These will include but are not limited to section corners, roads, and section lines. An updated map will be sent to BLM within 90 days after construction is completed on any new sites.

6. **Surface Pillar.** The lessee shall leave a minimum of 35' between the surface and the upper most workings in the mine. Any proposed surface pillar size of more than 50 feet or less than 35 feet will require prior approval by BLM. The lessee will submit documentation to the AO showing reduced pillar size will not result in any long-term surface subsidence. The AO must approve changes in surface pillar size prior to any changes.
7. **Quarterly Production Maps.** The lessee will submit maps quarterly to the BLM Utah State Office of the BLM showing the amount of gilsonite removed in the previous quarter. These will be submitted on 15 Jan., 15 Apr., 15 Jul. and 15 Oct. The maps will be scaled and show the depth of cut and the thickness of the vein at intervals that can be used to verify production. These maps shall be certified by a registered engineer, land surveyor or an official of the company.
8. **Yearly Mining Plan.** By 15 January of each year, the lessee will submit a one-year mine plan to the BLM Utah State Office showing the proposed mining sequences for the coming year on a scaled map. The one-year plan will describe the extraction sequence and the projected tonnages of ore to be extracted for that year.
9. **Lease Boundary Marking.** The lessee will mark the corners of the boundary of the lease with metal fencing posts and metal painted signs at each corner of the lease. The signs will show as a minimum the legal subdivision and the Federal gilsonite lease number. These signs will be located by survey. A scaled copy of this survey (map) will be sent to BLM Utah State Office 180 days after the start of construction of surface facilities.
10. **Groundwater.** Should groundwater flow be encountered in quantities greater than 5 gallons per hour during operations, the lessee/operator shall contact the Utah State Office Mining Engineer (801- 539-4036) and the Vernal Field Office Hydrologist or Geologist (435-781-4400) within 24 hours of the encounter and report on the following:
 - a. True vertical encountered depth
 - b. Subsurface location at which it was encountered
 - c. The approximate flow rate into the mine
 - d. Association of flow with any major geologic feature such as a fault or fracture surface.
 - i. Based upon this information, the AO will determine if the lessee will be required to monitor the effect of the flow into the mine on any nearby geologic formations, wildlife, or stock wells. If effects are found the AO will require the lessee mitigate the effects.
 - ii. All groundwater flows encountered in the mine shall be sampled and analyzed for the requirements of the discharge permit and any other parameters required by the AO to include but not limited to, total dissolved solids, pH, and total suspended solids. Results shall be provided to the Vernal District office Hydrologist (Vernal District Office, 170 L., 500 E., Vernal, UT, 84078) and Utah State Office Mining Engineer (USO, P.O. Box 45155, Salt Lake City, UT, 84145-0155) within 30 working days of encountering the water.
11. **Signage.** The lessee shall maintain a sign on the outside the hoist house at the working site that lists the Federal lease number.

12. **Shaft Sealing.** Final designs shall be submitted and reviewed by BLM prior to seal construction. The collar and other structures shall be removed.
- a. **Concrete Seals:** The final concrete seal over openings that penetrate the surface must conform to the following as a minimum:
- i. **Bedrock** - If the seal is to be in an exposed rock outcrop, the top of the seal shall be constructed so as to conform to the contour of the outcrop and shall be no higher than the adjacent rock. The color of the concrete shall be of such a color as to blend in the surrounding rock outcrop. The bottom of the seal shall sit on bedrock and shall be placed in the gilsonite.
 - ii. **Soil Area-** There shall be no alluvial material between the shaft cover and the gilsonite in the vein and the seal must be in-bedded in the gilsonite on the vein side of the cover.
13. **Paleontology.** The lessee shall stop construction activities and notify the AO if paleontological resources (vertebrate fossils) are exposed or identified during construction or mining. The BLM will provide mitigation measures to allow construction or mining. Costs of mitigation will be borne by the lessee.
14. **Containment Berm.** No topsoil from the lease shall be used in the construction of the containment berm on the low side of the shaft and ore bin area.
15. **Noxious Weeds.** The lessee will control noxious weeds on areas disturbed by mining and on adjacent undisturbed lands which will extend 50 feet beyond the disturbance. This shall be accomplished while these sites remain disturbed during operations and during reclamation until the AO has released the area. A list of noxious weeds may be obtained from the BLM or the appropriate County Extension Office. If herbicides or other pesticides or possibly hazardous chemicals are to be used, it is required that a Pesticide Use Proposal be submitted by the lessee and approved by the AO prior to any application.

CURRENT LIST OF UTAH NOXIOUS WEEDS

- a. Utah State Commissioner of Agriculture has officially designated 18 species listed below as noxious in Utah. Any changes/additions to this list will be required to be controlled under this condition of approval.
- b.

<u>CODE</u>	<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>
i.	Bermudagrass	<i>Cynodon dactylon (L.) Pers.</i>
ii.	Field Bindweed	<i>Convolvulus spp. (Wild Morning-glory)</i>
iii.	Broad-leaved Pepperweed	<i>Lepidium latifolium L. (Tall Whitetop)</i>
iv.	Canada Thistle	<i>Cirsium arvense (L.) Scop.</i>
v.	Diffuse Knapweed	<i>Centaurea diffusa Lam.</i>

vi.	Dyers Woad	<i>Isatis tinctoria</i> L.
vii.	Perennial Sorghum spp. Including but not limited To Johnson Grass	(<i>Sorghum halepense</i> (L.) Pers. and <i>Sorghum Almum</i> (<i>Sorghum alnum</i> , Parodi)
viii.	Medusahead	<i>Taeniatherum caput-medusae</i> (L.) Nevski
ix.	Leafy Spurge	<i>Euphorbia esula</i> L.
x.	Musk Thistle	<i>Carduus nutans</i> L.
xi.	Quackgrass	<i>Agropyron repens</i> (L.) Beauv.
xii.	Russian Knapweed	<i>Centaurea repens</i> (L.)
xiii.	Scotch Thistle	<i>Onopordium acanthium</i> L. (Cotton Thistle)
xiv.	Spotted Knapweed	<i>Centaurea maculosa</i> Lam.
xv.	Squarrose Knapweed	<i>Centaurea squarrosa</i> Roth
xvi.	Whitetop	<i>Cardaria</i> spp.
xvii.	Yellow Starthistle	<i>Centaurea solstitialis</i> L.
xviii.	Purple loosestrife	<i>Lythrum salicaria</i>

16. **Reclamation.** A seeding and grading plan and schedule will be submitted and approved by the AO prior to finalizing the reclamation. All disturbed areas will be reclaimed with native plant species. The seed mixture will be provided by the AO. Reclamation will not be accepted until the disturbed lands have attained the 80% of the same plan composition and density as the surrounding lands. The reclamation bond/liability will not be released until the AO accepts the reclamation in writing. Concurrent reclamation practices will be used.
17. **Topsoil.** Topsoil will be stripped and salvaged to provide for sufficient quantities to be re-spread to a depth of at least four to six inches (or more if readily available on-site) over the disturbed areas to be reclaimed. Topsoil will be stockpiled separately from subsoil materials. Topsoil to be stored for more than one year will be: 1) windrowed, where possible, to a depth of three to four feet near the margin [other than the margin with the run-off berm] of the north vein mine site; and 2) broadcast seeded with the prescribed seed mixture furnished by the AO immediately after windrowing, promptly followed by a dozer or other tracked vehicle “walking” the windrow to cover the broadcast seed.
 - a. Mulching may be one method considered to enhance the re-establishment of desired native plant communities. If straw or hay mulch is used, the straw and hay must be certified to be weed-free and the documentation submitted to the AO prior to usage.


- b. Upon the completion of mining operations, all equipment and facilities shall be removed. All waste rock will be dumped into the production shaft before it is sealed. If waste rock is to be left, the lessee must show that it will not contaminate the surrounding area and that there is sufficient topsoil (i.e., greater than 6 inches to cover the rock. All materials left in the mine will be reported to the AO prior to removal of the ability to descend down the shaft via the hoist and bucket. Written approval shall be obtained by the AO to leave the materials in the mine.
 - c. The disturbed areas will be reshaped to approximate the original [pre-disturbance] contour. Stockpiled topsoil shall be spread over the re-contoured areas.
18. **Access.** Existing roads shall be utilized to the greatest extent as possible.
19. **Chemicals.** No chemicals subject to SARA Title III in amounts greater than 10,000 lbs will be used. All spills of petroleum and chemicals will be cleaned up and disposed of in a proper manner.
20. **Condition of Approval Waiver.** Any of these conditions of approval may be waived by the authorized officer (AO) if either the resource values change or the lessee/operator demonstrates to the satisfaction of the (AO) that adverse impacts can be mitigated.

Notice(s)-

1. Any exploration or additional activities not included in the Mine Plan Approval must be approved by the BLM prior to commencement.
2. Should mining conditions warrant a change to your mine plan approval (mining and reclamation plan), you must submit, in writing a request for modification to the Utah State Office (attn: Mr. Stan Perkes) and receive a written approval prior to conducting the proposed modification(s).
3. This approval does not constitute any approval required by other agencies.

For further information contact Mr. Stan Perkes, (801) 539-4036.

Sincerely,

 /s/ Jeff McKenzie

James F. Kohler
Chief Solid Minerals

Enclosure: Map as stated above

bcc: Central Files
Vernal Field Office
Utah Division of Oil, Gas, and Mining (Attn. Paul Baker, 1594 West North Temple, P.O. Box 145801, Salt Lake City, Utah, 84114-5801

AGC Mining plan approval SP-SA 5-4-07